

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Saving space
- High Reliability
- Low reverse current and low forward voltage
- Micro Melf package,fits onto SOD 323/SOT 23 Footprints
 Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates
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Maximum Ratings

Parameter	Symbol	Value	Test Conditions
Repetitive peak reverse voltage MCL103A MCL103B MCL103C	V _{RRM}	40V 30V 20V	
Repetitive peak forward current	I _{FRM}	1A	
Forward current	I _{FM}	350 mA	
Power dissipation	PD	400 mW	
Storage temperature range	T _{stg}	-65~+175℃	
Junction to ambient	R_{thJA}	250K/W	

Electrical Characteristics @ 25°C Unless Otherwise Specified

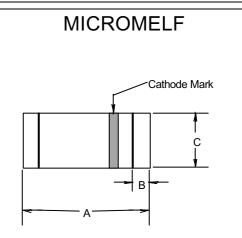
Parameter	Symbol	Value	Test Conditions
Forward voltage	V_{F}	0.37∨ 0.6 V	l _F =20mA l _F =200mA
Reverse current MCL103A MCL103B MCL103C	I _R	5 µ A	V _R =30V V _R =20V V _R =10V
Diode capacitance	C_{D}	50pF	V _R =V _F =0, f=1MHz
Reverse recovery time	t _{rr}	10ns	I _F = I _R =200mA to 0.1mA

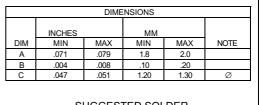
Note: 1. Lead in Glass Exemption Applied	d, see EU Directive Annex 7(C)-I.
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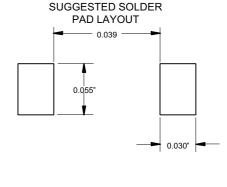
350 mA Schottky

MCL103A/B/C

Barrier Rectifier 20 to 40 Volts



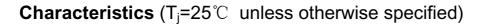


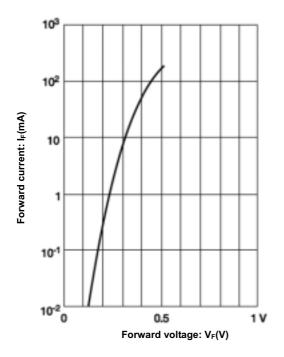


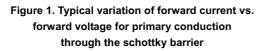
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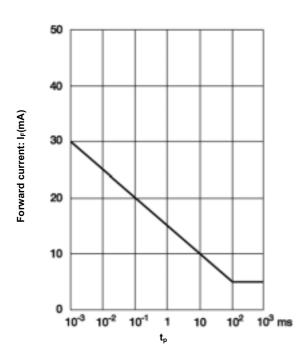


Figure 3. Typical non repetitive forward surge current vs. pulse width

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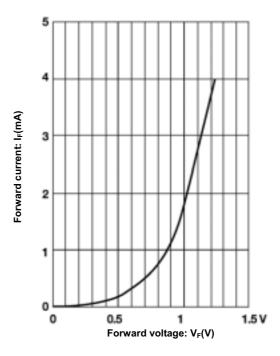
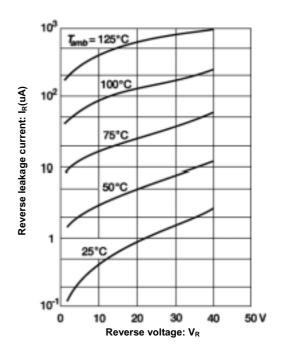
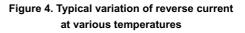


Figure 2. Typical high current forward conduction curve t_p=300ms, duty cycle=2%





Revision: B

2012/01/01



MCL103A/B/C

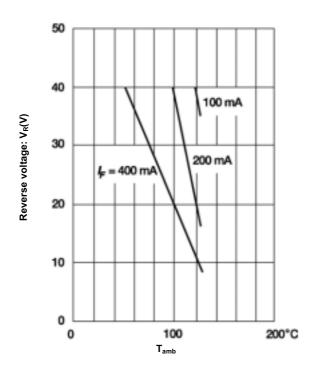


Figure 5. Blocking voltage duration vs. temperature at various average forward current

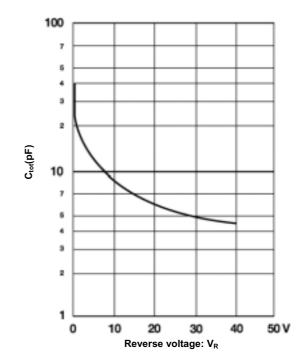


Figure 6. Typical capacitance vs. reverse voltage

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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